

Sciomyzidae of Oregon

(Diptera)

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Sciomyzid flies, commonly referred to as swale or marsh flies, are found world-wide and most of the more than 500 named species occur in the northern hemisphere. The family Sciomyzidae is separated from other acalyptrate Diptera by the following characters: oral vibrissae absent, post vertical bristles diverging, costa entire, subcosta complete, one or more tibiae with preapical bristles. Body length within the family ranges from 2 to 12 mm and may be pale yellowish-brown to brown to gray to black in color. At rest marsh flies impart a grasshopper-like appearance because of the well developed hind legs and the head held higher than the abdomen. The more hygrophilous species of these rather slow flying Diptera are often seen resting head end directed downward on emergent rushes or grasses along the margins of ponds, lakes, and sluggish streams. However, genera such as *Limnia* and *Tetanocera* are commonly taken well removed from free standing or flowing water in rather typical mesic habitats.

Subsequent to the discovery by Berg (1953) that larvae of sciomyzid flies kill and consume aquatic snails, extensive biologies of nearly 200 species have been studied, mainly at Cornell University. It is now established that larvae of all species studied are obligate mollusk feeders. Some develop only on slugs or terrestrial snails, but most feed on freshwater snails. Certain species feed specifically on fingernail clams, and an eastern U.S. seaboard species is associated with a strandline marine snail. Host association or feeding habit of sciomyzid larvae varies among the species from saprophagous to overt predation to parasitoid. Certain species, mainly among the Sciomyzini are highly host specific. Certain species of *Antichaeta* (Tetanocerini) oviposit on the egg mass of the host snail, and the first-instar larvae feed obligatorily on snail embryos. Instars II and III require more food and in addition attack snails such as *Physa* directly. Biologies of nearctic Sciomyzidae include those published by Bratt, et al. (1969), Fisher and Orth (1964), Foote and Knutson (1970), and Neff and Berg (1962, 1966).

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Applied interest in sciomyzid flies relates to the fact that certain fresh water snails serve as intermediate hosts of digenetic trematode diseases of higher vertebrates. Lymnaeid snails infest most wet pasture areas and are the intermediate hosts of liver flukes, *Fasciola* spp., which cause "liver rot" or "red water" in ungulates. Pregnant females may abort, infected animals become weak, and may die. Those which make it to the slaughter house produce inferior carcasses, and the infested livers cannot be sold as human food. Now that control of mosquito-borne diseases of man, such as malaria, filariasis, etc., has been greatly improved, Bilharzia, or schistosomiasis, has become the disease of prime importance in tropical climates of the world. The causative organisms, *Schistosoma* spp., must complete part of the life cycle in an aquatic snail and, as reported by Malek (1961), several species of snails may serve as the intermediate hosts. Swarms of cercariae issue from infested snails and swim to and penetrate the derm of man, the definitive host. Repeated exposure adds to the blood fluke population within the human body and severe debilitation and often death from secondary factors follows.

Although formal documentation is meager, there is no dispute from an academic view that sciomyzid flies are potential tools for the control of the snail vectors of trematodes. However, Boray (1964, 227) "... considered it unlikely that (in Australia) sciomyzid flies will prove to be of value as a means of biological control of *Lymnaea tomentosa*" (host of *Fasciola hepatica*). Boray's statement appears to apply equally to our field experience with *F. hepatica* in western U.S. during the past 15 years. Earlier, Chock, *et al.* (1961) reported on the introduction into Hawaii of *Sepedon macropus* for biological control of *Lymnaea ollula* a host of *Fasciola gigantica*. The senior author collected a few adult *S. macropus* during a survey trip to Hawaii in 1965 and was informed by local entomologists and ranchers that the snail population was lower than it was when *S. macropus* (plus other sciomyzid species) were first introduced. However, animal industry people were of the opinion that no reduction in the incidence of fluke-infested livers was evident from slaughter house records.

There have been no publications to our knowledge attesting to the successful utilization of sciomyzid flies for the biological control of the snail intermediate hosts of human schistosomes.

Thus, with present evaluation criteria, the few attempts to utilize sciomyzid flies either by introduction or manipulation of native species

for biological control of vector snails of trematodes have not resulted in significant clinical or economic reduction of the incidence of disease either in man or animals. The presumed explanation is that (1) snail populations cannot be eradicated, i.e. totally destroyed, by their natural enemies, and (2) the trematode population remains viable in a very low snail population. To date the only methods known which can effectively eliminate flukes even from localized areas are to separate snails and vertebrates either mechanically by drainage or fencing, or to kill the snails with chemical molluscicides. It is beyond the purpose of this paper to discuss parameters such as (1) the effect of molluscicides on non-target organisms, (2) the rapid rate of reinvasion by the highly ecologically diverse snails, and (3) ecological factors operating for and against successful colonization of natural enemies in an aquatic habitat.

SOURCES OF MATERIAL

During the course of a field survey in progress since 1962, the authors have developed a catalogue of sciomyzid flies of western North America. The data herein constitute an annotated checklist of Sciomyzidae known to occur in Oregon. It is primarily a qualitative presentation of species based on approximately 2,000 specimens seen by the authors from fifteen sources. It also includes records published by Bratt, *et al.* (1969), Foote (1961), Steyskal (1965), and Neff and Berg (1966) as well as unpublished records (correspondence) of L. V. Knutson and G. C. Steyskal (USNM), the leading American specialists on sciomyzid taxonomy.

Sources of material or information are indicated by the following codes, and the assistance and cooperation of all persons mentioned are gratefully acknowledged:

BAF* = B. A. Foote (1961)

CAS = California Academy of Sciences (P. H. Arnaud, Jr.)

CU* = Cornell University, det. by L. V. Knutson

GCS* = G. C. Steyskal (1965)

OSDA = Oregon State Department of Agriculture (R. L. Westcott)

OSU = Oregon State University (P. Oman)

OSU* = Oregon State University, det. by L. V. Knutson

UCB = University of California, Berkeley (E. I. Schlinger)

UCD = University of California, Davis (R. O. Schuster)

UCR = University of California, Riverside (T. W. Fisher and R. E. Orth)

UI = University of Idaho (W. Barr)

UK = University of Kansas (G. W. Byers)

USNM = U.S. National Museum (P. Hurd, L. V. Knutson, G. C. Steyskal)

WSU = Washington State University (W. J. Turner)

WSU* = Washington State University, det. by L. V. Knutson

Codes without asterisk indicate source of material seen by the authors.

Codes with asterisk indicate material as reported by Knutson, Steyskal, Foote, or Bratt mainly from USNM and CU records, or reported in correspondence with the authors.

No code indicates material collected by either or both authors (UCR) during 52 collections made on four trips into Oregon—6–8 August 1968, 17–21 June 1969, 9–12 July 1970, and 19–20 June 1972.

FORMAT

For each species is cited the original description, type locality, type depository if known, and an abbreviated synonymy. State or province records only are used to indicate distribution outside of Oregon.

OREGON RECORDS: In order to simplify the checklist, collection data have been summarized to indicate only the earliest and latest collection dates in the calendar year, the years spanned, and the lowest and highest elevations as stated on labels. Details can be provided by the authors upon request.

ANTICHAETA ROBIGINOSA Melander

Melander, A. L. 1920. *Ann. Entomol. Soc. Amer.* 13(3): 317. Holotype ♀; Three Forks, Gallatin Co., Montana; USNM; Redescribed—Fisher, T. W. and R. E. Orth. 1969a. *Pan-Pac Entomol.* 45(1):32–43. Neallotype, Alturas, Modoc Co., California; USNM.

DISTRIBUTION: Calif., Mont., Oreg., Wash.

OREGON RECORDS: 18 June to 8 August; 1968 to 1970; 400 to 4750 feet elev.

LAKE CO.: Drews Valley; 9 mi. south of Lakeview. LANE CO.: Eugene.
WASCO CO.: 13 mi. north of Warm Springs.

ANTICHAETA TESTACEA Melander

Melander, A. L. 1920. *Ann. Entomol. Soc. Amer.* 13(3): 318. Holotype ♂; Gallatin Co., Montana; USNM.

DISTRIBUTION: Calif., Idaho, Mont., N. Mex., Oreg., S. Dak., Utah.

OREGON RECORDS: 21 July 1969; 1250 feet elev.

JOSEPHINE CO.: 0.5 mi. south of Cave Junction.

ANTICHAETA VERNALIS Fisher and Orth

Fisher, T. W. and R. E. Orth. 1971. Pan-Pac. Entomol. 47(1): 38-40. Holotype ♂, Allotype; Willits, Mendocino Co., California; CAS no. 10208. [Prior to 1971 conspecific with *A. robiginosa*.]

DISTRIBUTION: Calif., Idaho, Oreg., Wash.

OREGON RECORDS: 5 to 27 March; 1919 to 1942; 160 feet elev.

MARION CO.: Turner (OSU); Roberts (OSU). WASHINGTON CO.: Forest Grove (UCB).

ATRICHOMELINA PUBERA (Loew)

Loew, H. 1862. (Sciomyza) Smithsn. Misc. Collect. 6(1[= Pub. 141]): 106-107. Holotype ♂; Middle states.

DISTRIBUTION: Alta. to Ont., continental United States excluding Alaska, south to Mexico (D. F.).

OREGON RECORDS: 17 June to 20 October; 1917 to 1970; 224 to 4400 feet elev.

BENTON CO.: Corvallis (BAF*); Philomath (BAF*). CLACKAMAS CO.: Colton (OSDA). CROOK CO.: 19 mi. south of Prineville. HARNEY CO.: 45 mi. east of Burns (OSDA). HOOD RIVER CO.: Hood River. JOSEPHINE CO.: 0.5 mi. south of Cave Junction. KLAMATH CO.: 4 mi. east of Sprague River; 20 mi. north of Klamath Falls; Klamath Falls (BAF*). LANE CO.: Eugene; 15 mi. west of Oakridge. LINCOLN CO.: 4 mi. south of Newport (OSDA); Newport (BAF*). MARION CO.: 0.5 mi. west of Mill City; Salem-Albany (BAF*). YAMHILL CO.: 5 mi. south of Dayton. WASCO CO.: 13 mi. north of Warm Springs.

DICTYA EXPANSA Steyskal

Steyskal, G. C. 1938. Occas. Pap. Mus. Zool. Univ. Michigan 386: 9. Holotype ♂; Detroit, Michigan.

DISTRIBUTION: B. C. to Que., Wash. to N. Y., s. from Ariz. to Ga.

OREGON RECORDS: 17 August to 22 September; 1963 to 1968.

MALHEUR CO.: 12 mi. southwest of Nyssa (OSDA). UMATILLA CO.: Hermiston (OSDA); Cold Springs (BAF*). UNION CO.: 8 mi. southeast La Grande (OSDA).

DICTYA FONTINALIS Fisher & Orth

Fisher, T. W. and R. E. Orth. 1969. Pan-Pac. Entomol. 45(3): 222-228. Holotype ♂, allotype; Boca Spring, Nevada Co., California; CAS no. 10207.

DISTRIBUTION: Calif., Oreg.

OREGON RECORD: 24 May 1964.

JOSEPHINE CO.: 4 mi. west of Selma (OSDA).

DICTYA MONTANA Steyskal

Steyskal, G. C. 1954. Ent. Soc. Amer. Ann. 47: 534. Holotype ♂, allotype; Paradise Cove, Marin Co., California; USNM. [We recognize four clinal forms, all of which occur in Oregon.]

DISTRIBUTION: B. C. to Sask., s. to Calif., Ariz., Colo.

OREGON RECORDS: 27 May to 25 August; 1944 to 1972; 150 to 5000 feet elev.

BENTON CO.: Corvallis (BAF*); 10 mi. south of Corvallis, Winkle Lake (OSU). CLACKAMAS CO.: 0.5 mi. west of Government Camp. CROOK CO.: 10 mi. southeast of Prineville (BAF*); 19 mi. south of Prineville. CURRY CO.: Floras Lake, 12 mi. north of Port Orford (OSDA). DESCHUTES CO.: 6 mi. southwest of Bend (OSDA); Redmond, Deschutes River (BAF*). GRANT CO.: 10 mi. north of Seneca (BAF*). HOOD RIVER CO.: 1 mi. south of Hood River; 15 mi. southeast of Hood River (OSDA), 0.5 mi. south of Sherwood Campground. JACKSON CO.: 9 mi. north of Butte Falls (OSDA); Jenny Creek, Hwy. 66; 1.3 mi. southwest of Prospect; Medford (BAF*); Butte Falls (BAF*). JOSEPHINE CO.: 0.5 mi. south of Cave Junction; Merlin (OSDA). KLAMATH CO.: Klamath Game Refuge; 4 mi. east of Sprague River; Odell Lake (BAF*). LAKE CO.: Drews Valley; 9 mi. south of Lakeview; 12 mi. east of Lakeview (OSDA); south end of Summer Lake (OSDA). LANE CO.: 4 mi. east of Belknap Springs (USNM); 5 mi. south of Cottage Grove (OSDA); Eugene; 7 mi. west of Eugene. MALHEUR CO.: Juntura (OSDA). MARION CO.: 0.5 mi. west of Mill City. MULTNOMAH CO.: Portland (OSDA). WASCO CO.: Mt. Hood National Forest; 13 mi. north of Warm Springs. YAMHILL CO.: 5 mi. south of Dayton.

ELGIVA CONNEXA (Steyskal)

Steyskal, G. C. 1954. (*Hedroneura*) Ent. Soc. Wash. Proc. 56(2): 60. Holotype ♂, Allotype; Matanuska Valley, Alaska, USNM no. 51609. [We recognize a separate distinct clinal form in parts of northern Oregon and Washington.]

DISTRIBUTION: Alaska to Ont., s. to Calif., N. Mex., Nebr.

OREGON RECORDS: 1 July to 13 September; 1918 to 1970; 150 to 5000 feet elev.

BENTON CO.: Corvallis (UCB), 10 mi. south of Corvallis (BAF*). CLACKAMAS CO.: 0.5 mi. west of Government Camp. GRANT CO.: 10 mi. north of Seneca (BAF*). LAKE CO.: Drews Valley; 9 mi. south of Lakeview. MARION CO.: 0.5 mi. west of Mill City. WASHINGTON CO.: Forest Grove (UCB). YAMHILL CO.: 5 mi. south of Dayton.

ELGIVA SUNDEWALLI Kloet and Hincks

Kloet, G. S., and W. D. Hincks. 1945.

Synonymy: *Hedroneura* Hendel; *rufa* Panzer, *lineata* Day.

DISTRIBUTION: Alaska to N. S., s. to Calif., N. Mex., N. Y.

OREGON RECORDS: 17 June to 7 August; 1964 to 1972; 150 to 5000 feet elev.

JOSEPHINE CO.: 0.5 mi. south of Cave Junction. KLAMATH CO.: 20 mi. north of Klamath Falls; Klamath Game Refuge. LAKE CO.: Drews Valley. LANE CO.: Eugene airport. UNION CO.: North Powder (OSDA). YAMHILL CO.: 5 mi. south of Dayton.

HOPLODICTYA ACUTICORNIS (v. d. Wulp)

Wulp, F. M. van der. 1897. (*Tetanocera*) *Biologia Centrali-Americana*. Diptera. II, 358. April 1888–May 1903. Holotype ♂ Mexico, Northern Sonora (Morrison). [Separated from *Hoplodictya spinicornis* (Loew) and redescribed by Fisher and Orth (1972a).] Lectotype ♂, Paralectotypes; Brit. Mus. Natl. Hist.

DISTRIBUTION: B. C., Ont., Ariz., Calif., Ill., Kans., Okla., Oreg., Nebr., N. Mex., Utah, Wash.

OREGON RECORDS: 19 June to 8 August; 1968 to 1972; 1250 to 4750 feet elev.

JACKSON CO.: Eagle Point. JOSEPHINE CO.: 0.5 mi. south of Cave Junction. LAKE CO.: 9 mi. south of Lakeview.

LIMNIA BOSCHII (Robineau-Desvoidy) *

Robineau-Desvoidy, J. B. 1830. (*Pherbina*). *Inst. de France, Sci. Math. et Phys., Acad. Roy. des Sci., Mem. presentes par divers Savans* [ser. 2], 2: 690. Holotype ♀; The Carolinas.

DISTRIBUTION: Alaska to Nfld., s. to Calif. and N. C.

OREGON RECORDS: 17 June to 9 July; 1949 to 1972. 1200 to 4440 feet elev.

BAKER CO.: Baker (USNM). CLACKMAS CO.: 0.5 mi. west of Government Camp. JEFFERSON CO.: 8 mi. north of Camp Sherman (OSDA). JOSEPHINE CO.: 0.5 mi. south of Cave Junction. KLAMATH CO.: 6 mi. south of La Pine; Crescent, Deschutes Rd. WASCO.: Mt. Hood National Forest; 13 mi. north of Warm Springs.

LIMNIA INOPA (Adams) †

Adams, C. F. 1904. (*Tetanocera*). *Kans. Univ. Sci. Bul.* 2 [= whole ser., 12]: 448 (= *Kans. Univ. Bul.* (6)). Holotype ♂; Washington Territory.

DISTRIBUTION: Alta., B. C., Calif., Idaho, Mont., Oreg., Wash.

OREGON RECORDS: 3 July to 26 July; 1931 to 1970; 400 to 4750 feet elev.

BAKER CO.: Spring Creek (WSU). HOOD RIVER CO.: Hood River (UK); Mt. Hood (UK); 0.5 mi. south of Sherwood Campground. JACKSON CO.: 5 mi. southwest of Sams Valley (WSU). WASCO CO.: Hwy. 26, 1.5 mi. south of junction Hwy. 216.

* We feel *L. boschii* is a composite of 3 species. In a generic revision of North American species of *Limnia* by Steyskal, Fisher, Knutson and Orth, (ms. in prep.), *L. sandovalensis* Fisher & Orth will be the name applied to all the Oregon "*boschii*" we have seen.

† *Limnia inopa* (Adams) 1904 resurrected. Synonymy: *Limnia brevicostalis* Melander, 1920. Revision in press. Fisher & Orth (1975).

LIMNIA PUBESCENS (Day)

Day, L. T. 1881. (*Tetanocera*). *Canad. Entom.* 13: 86. Types ♂ and ♀; Washington Territory.

DISTRIBUTION: B. C., Calif., Idaho, Oreg., Wash.

OREGON RECORDS: 21 May to 29 August; 1935 to 1960; 1350 to 1540 feet elev.

BENTON CO.: Corvallis (BAF*); Monroe (BAF*). HOOD RIVER CO.: Mt. Hood (UK). JACKSON CO.: Tou Velle State Park, 8 mi. north of Medford (OSU); Phoenix (BAF*). MULTNOMAH CO.: Portland (BAF*). YAMHILL CO.: McMinnville (CAS).

LIMNIA SARATOGENSIS (Fitch)

Fitch, A. 1855. (*Tetanocera*). *N. Y. State Agr. Soc. Trans.* (1854) 14: 772. Holotype ♀; New York.

[We no longer recognize *Limnia saratogensis*. The description is vague and letter correspondence (16 August 1972) from L. V. Knutson USNM, reads "The type of *L. saratogensis* Fitch is in the USNM and is a badly molded, unrecognizable female..." We feel locality references for *L. saratogensis* in Oregon made by B. A. Foote (1961) probably should be assigned to *L. severa* Cresson.]

LIMNIA SEVERA Cresson

Cresson, E. T., Jr 1920. *Trans. Amer. Ent. Soc.* 46: 80. Holotype ♂; Cayton, Shasta County, California; CAS. Synonymy: *Limnia unguicornis* var. *severa* Cresson; *Limnia saratogensis* var. *severa* Cresson; *Limnia saratogensis* var. *armipes* Melander; *Limnia armipes* Melander; [For complete details see Fisher and Orth (1971).]

DISTRIBUTION: B. C., Ariz., Calif., Colo., Oreg., Wash.

OREGON RECORDS: 15 June to 13 August; 1945 to 1972; 50 to 4750 feet elev.

COOS CO.: Bandon (OSDA). DOUGLAS CO.: 3.8 mi. northeast of Jackson Co. line; Tenmile (OSDA). JACKSON CO.: Eagle Point; Jenny creek; 6 mi. north of Medford; 1.3 mi. southwest of Prospect; 2 mi. south of Willow Lake, Indian Glade (OSDA). JOSEPHINE CO.: 0.5 mi. south of Cave Junction; Lake Selmac (UCB). KLAMATH CO.: 15 mi. southwest of Keno (WSU). LANE CO.: 2 mi. south of Florence (USNM). WASCO CO.: Mt. Hood National Forest; 13 mi. north of Warm Springs. WASHINGTON CO.: Timber (OSDA).

PHERBELLIA GRISEOLA (Fallén)

Fallén, C. F. 1820. (*Sciomyza*). *Sciomyzides Sveciae*, 14. Type; Europe.

DISTRIBUTION: Europe; Ont., Queb.; Calif., Idaho, Mich., Mont., N. Y., Oreg., Utah, Wash.

OREGON RECORDS: 20 June to 7 August; 1968 to 1972; 390 to 4540 feet elev.

KLAMATH CO.: Klamath Game Refuge; Silver Creek State Park. LANE CO.: Eugene airport.

PHERBELLIA HUMILIS (Loew)

Loew, H. 1876. (*Sciomyza*). Ztschr. f. die Gesam. Naturw. 48-330. Types ♂ and ♀: Texas. Synonymy: *Pherbellia grisescens* (Mcigen), palaeartic, see Steyskal (1963).

DISTRIBUTION: Throughout s. Canada and U. S., south to Costa Rica, see Bratt, *et al.*, (1969).

OREGON RECORDS: 17 June to 7 August; 1963 to 1972; 150 to 5200 feet elev.

CROOK CO.: 19 mi. south of Prineville. DOUGLAS CO.: Diamond Lake. HARNEY CO.: 45 mi. east of Burns (OSDA). JACKSON CO.: Eagle Point, Hwy. 62; 6 mi. north of Medford; northwest of Tou Velle St. Park; Butte Falls (BAF*). KLAMATH CO.: Klamath Game Refuge; 20 mi. north of Klamath Falls. LANE CO.: Eugene. WASCO CO.: 13 mi. north of Warm Springs. YAMHILL CO.: 5 mi. south of Dayton.

PHERBELLIA IDAHOENSIS Steyskal

Steyskal, G. C. 1961. Papers Mich. Acad. Sci., Arts, Letters. 46: 411. Holotype ♂; Moscow, Latah Co., Idaho; UI.

DISTRIBUTION: Calif., Idaho, Oreg., Wash.

OREGON RECORDS: 20 June 1972 and 3 July 1954; 4105 and 4200 feet elev.

KLAMATH CO.: Klamath Falls (UI); Silver Creek State Park.

PHERBELLIA MELANDERI Steyskal

Steyskal, G. C. 1963. Papers Mich. Acad. Sci., Arts, and Letters. 48: 117. Holotype ♂; Three Forks, Gallatin Co., Montana; USNM.

DISTRIBUTION: Calif., Colo., Mont., Oreg., Utah.

OREGON RECORDS: 5 June to 17 June; 1963 to 1972; 4160 feet elev.

HARNEY CO.: 9 mi. north of Andrews (OSDA). KLAMATH CO.: 20 mi. north of Klamath Falls.

PHERBELLIA NANA (Fallén)

Fallén, C. F. 1820. (*Sciomyza*). *Sciomyzides Sveciae*. 15. Lund. Types ♂ and ♀; Europe.

DISTRIBUTION: Europe; Alaska, Canada, U. S., s. to Mexico (D. F.).

OREGON RECORDS: 27 March to 5 September; 1918 to 1972.

BENTON CO.: 12 mi. south of Corvallis (BAF). CROOK CO.: Prineville (BAF); 19 mi. south of Prineville. CURRY CO.: 12 mi. north of Port Orford, Flores Lake (OSDA). DESCHUTES CO.: 20 mi. south of Bend (BAF); Pringle Falls, west of La Pine (BAF). HARNEY CO.: 9 mi. north of Andrews, Alvord Hot Springs (OSDA). HOOD RIVER CO.: Parkdale. JACKSON CO.: 6 mi. north of Medford; northwest of Tou Velle State Park; Prospect (BAF). JEFFERSON CO.: 8 mi. north of Camp Sherman (OSDA). JOSEPHINE CO.:

0.5 mi. south of Cave Junction. KLAMATH CO.: Crescent, Deschutes Rd.; 7 mi. south of Klamath Falls; 20 mi. north of Klamath Falls; Klamath Game Refuge; 6 mi. south of La Pine; Silver Creek State Park; 4 mi. east of Sprague River. LAKE CO.: 12 mi. south of Lakeview (OSDA); south end Summer Lake (OSDA). WASCO CO.: 13 mi. north of Warm Springs. WASHINGTON CO.: Forest Grove (UCB). UMATILLA CO.: Ukiah (BAF*). COLUMBIA CO.: Scrappoose (BAF*).

PHORBELLIA OBSCURA Ringdahl

Ringdahl, O. 1948. *Opuscula Entomologica* 13: 52. Synonymy: Separated from *Phorbellia ventralis* (Fallén), palearctic; see Bratt, *et al.*, (1969:73).

DISTRIBUTION: Europe; Alaska, Canada, U. S.

OREGON RECORD: 160 feet elev.

MARION CO.: Salem (CU*).

PHORBELLIA OREGONA Steyskal

Steyskal, G. C. 1961. *Papers Mich. Acad. Sci., Arts, Letters* 46: 411-412. Holotype ♂; Forest Grove, Washington Co., Oregon; UI.

DISTRIBUTION: Calif., Oreg.

OREGON RECORDS: 5 July 1963, 40 feet elev.; 11 July 1970, 900 feet elev.

LINCOLN CO.: 4 mi. south of Newport (OSDA). MARION CO.: 0.5 mi. west of mill City.

PHORBELLIA PROPAGES Steyskal

Steyskal, G. C. 1966. *Papers Mich. Acad. Sci., Arts, Letters* 51: 37-38. Holotype ♂; Aweme, Manitoba; USNM no. 67877.

DISTRIBUTION: Alaska throughout Canada s. to northern Calif. to Ohio.

OREGON RECORDS: 1 April to 26 September; 1919 to 1969; 400 to 4750 feet elev.

BENTON CO.: Parker Creek, Mary's Peak (OSDA). HOOD RIVER CO.: 0.5 mi. south of Sherwood Campground. MARION CO.: Breitenbush (OSDA). WASCO CO.: Mt. Hood National Forest. WASHINGTON CO.: Hillsboro (OSDA).

PHORBELLIA SCHOENHERRI MACULATA (Cresson)

Cresson, E. T., Jr. 1920. (*Melina*). *Trans. Amer. Entom. Soc.* 46: 48. Holotype ♂; Illinois; ANSP no. 6222.

DISTRIBUTION: Alaska to Nfld. s. to Calif., Colo., Ill., N. Y.

OREGON RECORDS: 12 July to 8 August; 1967 to 1970; 3500 to 5000 feet elev.

CROOK CO.: 27 mi. east of Prineville (BAF). JACKSON CO.: Jenny Cr., Hwy. 66. KLAMATH CO.: 8 mi. east of Chemult (UCB); 4 mi. east of Sprague

River. LAKE CO.: Drews Valley; 9 mi. south of Lakeview. UNION CO.: 8 mi. southeast of La Grande (OSDA).

HERBELLIA VITALIS (Cresson)

Cresson, E. T., Jr. 1920. (*Melina*). Trans. Amer. Entom. Soc. 46: 43-44. Holotype ♂; Berkeley Hills, Alameda Co., California; ANSP no. 6221.

DISTRIBUTION: Alaska e. to northern Que. s. to Calif., N. Mex., Kans., Ind., N. Y.

OREGON RECORDS: 5 May to 26 September; 1918 to 1972; 400 to 4400 feet elev.

COLUMBIA CO.: St. Helens (BAF). BENTON CO.: Parker Creek, Mary's Peak (OSDA). HARNEY CO.: 45 mi. east of Burns (OSDA). JACKSON CO.: Butte Falls (BAF*); southwest of Prospect. KLAMATH CO.: Crescent, Deschutes Rd.; 7 mi. south of Klamath Falls; 20 mi. north of Klamath Falls; 4 mi. east of Sprague River. LAKE CO.: 12 mi. south of Lakeview (OSDA). LANE CO.: Eugene. WASCO CO.: 13 mi. north of Warm Springs. WASHINGTON CO.: Forest Grove (UCB). UMATILLA CO.: Cold Springs (BAF).

PTEROMICRA SISKIYOUENSIS Fisher & Orth

Fisher, T. W. and R. E. Orth. 1966. Pan-Pac. Entom. 42(4): 307-318. Holotype ♂, Allotype; Grass Lake, Siskiyou Co., California; CAS no. 10168. [Specimens may be labeled as *Pteromicra nigrimana* (Meigen) prior to separation by Fisher and Orth (1966).]

DISTRIBUTION: Alta., B. C.; Calif., Idaho, Mont., Oreg., Wash., Wyo.

OREGON RECORDS: 20 June to 7 August; 1968 to 1972; 4160 to 5100 feet elev.

KLAMATH CO.: Klamath Game Refuge; 20 mi. north of Klamath Falls; Odell Creek; Silver Creek State Park; east of Willamette Pass.

RENOCERA CYATHIFORMIS Melander

Melander, A. L. 1920. Ann. Ent. Soc. Amer. 13: 319. Type; Mount Constitution, Orcas Island, Washington.

DISTRIBUTION: Alaska, Calif., Colo., Idaho, Oreg., Mich., N. Mex.

OREGON RECORDS: 18 June to 9 July; 1963 to 1970; 3380 to 3750 feet elev.

CLACKAMAS CO.: 0.5 mi. west of Government Camp; 1 mi. north of Government Camp; Mt. Hood Natl. Forest. UNION CO.: 10 mi. south of Tollgate Pass, Hwy. 204 (OSDA).

RENOCERA PACIFICA Curran

Curran, C. H. 1933. Amer. Mus. Nat. Hist., Amer. Mus. Novitates 682: 9. Holotype ♀; Boiler Bay, Oregon.

DISTRIBUTION: Oregon.

OREGON RECORDS: 18 May 1930.

LINCOLN CO.: Boiler Bay. This species is known only from the Holotype ♀. [We have not seen the type, hence we must reserve judgement regarding the taxonomic affiliation of this specimen. Because species separation in many sciomyzid genera is more easily definitive on the basis of male characters, we would not be surprised if *R. pacifica* and *R. cyathiformis* are conspecific.]

SCIOMYZA SIMPLEX Fallén

Fallén, C. F. 1820. *Sciomyzides Sveciae*: 12. Types ♂ and ♀: Europe.

DISTRIBUTION: Europe; Alaska to Manitoba, s. to Calif., Ariz., Wyo., Mich.

OREGON RECORDS: 20 June to 8 August; 1968 to 1972; 4160 to 5000 feet elev.

KLAMATH CO.: 4 mi. south of Fort Klamath; Klamath Falls (BAF*); 7 mi. south of Klamath Falls; 20 mi. north of Klamath Falls; Silver Creek State Park; 4 mi. east of Sprague River; LAKE CO.: Drews Valley; 9 mi. south of Lakeview.

SEPEDON ARMIPES Loew

Loew, H. 1859. *Wien. Ent. Monatschr.* 3: 298. Type: Middle States. [Not yet discovered in Oregon but approaches to within 50 miles of the Oregon border in Idaho. Oregon specimens labeled *Sepedon armipes* are probably *Sepedon capellei*. See Fisher and Orth (1969b).]

SEPEDON BOREALIS Steyskal

Steyskal, G. C. 1951 (1950). *Wasmann Jour. Biology* 8(3): 283. Holotype ♂, Allotype; Yale, Idaho; USNM no. 60906.

DISTRIBUTION: Alaska, B. C. to Nfld., s. to Calif., N. Mex., Ill., Pa., N. Y.

OREGON RECORDS: 18 June to 7 August; 1952 to 1972; 2450 to 4250 feet elev.

BENTON CO.: Corvallis (BAF*). CLACKAMAS CO.: 0.5 mi. west of Government Camp; Mt. Hood National Forest. HOOD RIVER CO.: 1.7 mi. north of Barlow Pass; 0.5 mi. south of Sherwood Campground. JACKSON CO.: Jenny Creek, Hwy. 166; 1.3 mi. southwest of Prospect; 2 mi. south of Willow Lake, Indian Glade (OSDA). KLAMATH CO.: Crescent, Deschutes Rd.; 8 mi. east of Chemult, Skookum Butte; 4 mi. south of Fort Klamath; 6 mi. south of La Pine. LAKE CO.: 11 mi. east of Lakeview (UCB). LANE CO.: 3 mi. west of Willamette Pass (OSDA). WASCO CO.: Mt. Hood National Forest.

SEPEDON CAPELLEI Fisher & Orth

Fisher, T. W. and R. E. Orth. 1969. *Pan-Pac. Entom.* 45(2): 157. Holotype ♂, Allotype; Bishop, Inyo Co., California; CAS no. 10166. [Separated from *Sepedon armipes* by Fisher and Orth (1969).]

DISTRIBUTION: Calif., Idaho, Oreg., Nev., Utah.

OREGON RECORDS: 19 May to 18 September; 1917 to 1972; 1200 to 4750 feet elev.

CROOK CO.: Ochoco Creek (OSU*); Prineville (OSDA); 19 mi. south of Prineville. DESCHUTES CO.: Bend (OSU*); 20 mi. south of Bend (WSU*).

GRANT CO.: 10 mi. south of Seneca (OSU*, BAF*). HOOD RIVER CO.: Hood River (UCB). JACKSON CO.: Butte Falls (BAF*); nr. Prospect (BAF*); 2 mi. south of Willow Lake, Indian Glade (OSDA). JOSEPHINE CO.: 0.5 mi. south of Cave Junction. KLAMATH CO.: Crescent, Deschutes Rd.; Fort Klamath, Crooked Creek (WSU*); 4 mi. south of Fort Klamath; Harpold Dam (WSU*); Klamath Game Refuge; 6 mi. south of La Pine; 4 mi. east of Sprague River. LAKE CO.: 9 mi. south of Lakeview. MALHEUR CO.: Malheur River Canyon (OSU*). UNION CO.: North Powder (CU*, UK); Anthony Lake (UK). WALLOWA CO.: Enterprise (WSU*); Minam (WSU*, BAF*). WASCO CO.: 13 mi. north of Warm Springs. WHEELER CO.: Richmond (WSU*).

SEPEDON CASCADENSIS Fisher & Orth

Fisher, T. W. and R. E. Orth. 1974. Pan-Pac. Entomol. 50(3): 291-297. Holotype ♂, Allotype; 0.5 mi. south of Sherwood Campground, Hood River Co., Oregon; CAS no. 12038.

DISTRIBUTION: Known only from the Cascade Mts. of Oregon.

OREGON RECORDS: 22 May to 12 July; 1954 to 1972; 2400 to 3180 feet elev.

HOOD RIVER CO.: Barlow Pass; 0.5 mi. south of Sherwood Campground. JACKSON CO.: 1.3 mi. southwest of Prospect. MARION CO.: Breitenbush.

SEPEDON FUSCIPENNIS FUSCIPENNIS Loew

Loew, H. 1859. Wien. Ent. Monatschr. 3: 299. Types ♂ and ♀; Middle States.

DISTRIBUTION: Alaska to Nfld., s. to Calif., N. Mex., Tex., Fla.

OREGON RECORDS: 20 June to 24 October; 1924 to 1969; 50 to 4540 feet elev.

BENTON CO.: 10 mi. south of Corvallis, Winkle Lake (OSU); 12 mi. south of Corvallis (BAF*). JOSEPHINE CO.: 0.5 mi. south of Cave Junction. KLAMATH CO.: 4 mi. north of Fort Klamath; Klamath Falls (BAF*); 10 mi. north of Klamath Falls (UCB). LANE CO.: Eugene; Eugene airport; 7 mi. west of Eugene; 0.5 mi. east of Florence. MARION CO.: 0.5 mi. west of Mill City. YAMHILL CO.: 5 mi. south of Dayton.

SEPEDON PACIFICA Cresson

Cresson, E. T., Jr. 1914. Ent. News. 25: 457. Holotype ♂; Redwood Canyon, Marin Co., California; ANSP no. 6076. [Material labeled prior to Fisher and Orth (1972b) may appear as *Sepedon praemiosa* Giglio-Tos. *S. praemiosa* does not occur in the Pacific northwest.]

DISTRIBUTION: B. C. to Sask. s. to Baja Calif. north to Nev., Colo., S. Dak.

OREGON RECORDS: 17 June to 30 September; 1918 to 1972; 400 to 5000 feet elev.

CROOK CO.: 19 mi. south of Prineville. DOUGLAS CO.: Diamond Lake. HARNEY CO.: Fields (OSDA). JACKSON CO.: Eagle Point, Hwy. 62; northwest of Tou Velle State Park. KLAMATH CO.: Bly; Klamath County Fish Hatchery (BAF*, USNM); Klamath Game Refuge; 10 mi. north of Klamath Falls (UCB); Klamath Lake, Eagle Ridge (CAS); Silver Creek

State Park; 4 mi. east of Sprague River. LAKE CO.: Drews Valley. LANE CO.: Eugene. MARION CO.: 0.5 mi. west of Mill City. UMATILLA CO.: Hermiston (USNM); Cold Springs (BAF*). UNION CO.: Hot Lake (UK); North Powder (OSDA, UK). WASCO CO.: 13 mi. north of Warm Springs. WASHINGTON CO.: Forest Grove (UCB). YAMHILL CO.: 5 mi. south of Dayton.

SEPEDON PSEUDARMIPES Fisher & Orth

Fisher, T. W. and R. E. Orth. 1969. Pan-Pac. Entomol. 45(2): 159-160. Holotype ♂; O'Sullivan Dam, Grant Co., Washington; CAS no. 10167. [Separated from *Sepedon armipes* by Fisher & Orth. (1969).]

DISTRIBUTION: B. C., Idaho, Oreg., Wash.

OREGON RECORDS: 11 April 1954.

UMATILLA CO.: Cold Springs (WSU).

SEPEDON SPINIPES AMERICANA Steyskal

Steyskal, G. S. 1951. Wasmann Jour. Biology. 8(3): 277 (1950). Holotype ♂; Hamburg, Livingston Co., Michigan; USNM.

DISTRIBUTION: Alaska, B. C. to Que., s. to Calif., Utah, Wyo., Ohio, Pa., N. Y.

OREGON RECORDS: 6 May to 22 September; 1924 to 1972; 2560 to 4540 feet elev.

BAKER CO.: Hereford (CAS). BENTON CO.: Corvallis (BAF*). JACKSON CO.: southwest of Prospect, Hwy. 62; KLAMATH CO.: Crescent, Deschutes Rd.; Klamath Game Refuge; Klamath Lake, Eagle Ridge (CAS); Silver Creek State Park. UNION CO.: 8 mi. southeast of La Grande (OSDA).

TETANOCERA BERGI Steyskal

Steyskal, G. C. 1954. Ent. Soc. Wash. Proc. 56: 66. Holotype ♂, Allotype; Matanuska Valley, Alaska; USNM no. 61791.

DISTRIBUTION: Alaska, B. C., Alta., Manit., Oreg.

OREGON RECORD: 6 August 1968; 20 feet elev.

DOUGLAS CO.: 7 mi. east of Reedsport.

TETANOCERA FERRUGINEA Fallén

Fallén, C. F. 1820. Sciomyzides Sveciae p: 9. Lundae [= Lund]. Types ♂ and ♀; Europe. Synonymy: *Tetanocera triangularis* Loew, *Tetanocera huronensis* Steyskal.

DISTRIBUTION: Europe; Alaska, B. C. to Nfld., s. to Calif., Colo., S. Dak., Ill., N. Y.

OREGON RECORDS: 20 June to 7 August; 1968 to 1972; 4200 to 4540 feet elev.

HARNEY CO.: 19 mi. south of Frenchglen (BAF*). KLAMATH CO.: Eagle Ridge, Klamath Lake (GCS*); Klamath Game Refuge; Silver Creek State Park; 4 mi. east of Sprague River. POLK CO.: Buena Vista (BAF*).

TETANOCERA LATIFIBULA Frey

Frey, R. 1924. Notulae Ent. 4: 51. Holotype ♂; Europe. Synonymy: *Tetanocera hespera* Steyskal.

DISTRIBUTION: Europe; Alaska, Alta, Wash., S. Dak., s. to Calif., Utah, N. Mex.

OREGON RECORDS: 30 June to 25 August; 1951 to 1970; 4160 to 5000 feet elev.

BENTON CO.: 10 mi. south of Corvallis, Winkle Lake (OSU). KLAMATH CO.: Klamath Game Refuge; 7 mi. south of Klamath Falls; 4 mi. east of Sprague River. LAKE CO.: Chandler State Park (CAS); Drews Valley; 5 mi. south of Lakeview (OSDA); 12 mi. south of Lakeview (OSDA).

TETANOCERA LOEWI Steyskal

Steyskal, G. S. 1959. Mich. Acad. Sci., Arts, and Letters, Papers. 44: 68 (1958). Holotype ♂, Allotype; Deerfield Township, Lapeer Co., Michigan; G. C. Steyskal, USNM.

DISTRIBUTION: B. C., Ont.; Calif., Ind., Mich., N. Y., Ohio, Oreg., Wash., Wis.

OREGON RECORDS: 20 June to 30 September; 1918 to 1969; 360 to 390 feet elev.

LANE CO.: Eugene airport; 3 mi. north of Junction City. WASHINGTON CO.: Forest Grove (UCB).

TETANOCERA MESOPORA Steyskal

Steyskal, G. C. 1959. Mich. Acad. Sci., Arts and Letters, Papers. 44: 70 (1958). Holotype ♂, Allotype; Walden, Colorado; G. C. Steyskal, USNM.

DISTRIBUTION: N. W. T., B. C. to Nfld., s. to Calif., Nev., N. Mex., S. Dak., Mich., N. Y.

OREGON RECORDS: 20 June to 7 August; 1932 to 1972; 4160 to 5200 feet elev.

DOUGLAS CO.: Diamond Lake; KLAMATH CO.: 4 mi. south of Fort Klamath; Klamath Falls (OSU); 7 mi. south of Klamath Falls; Klamath Game Refuge; 4 mi. east of Sprague River.

TETANOCERA PLUMOSA Loew

Loew, H. 1847. Stettin. Entom. Zeitung 8: 201. Holotype ♀; Sitka, Alaska; MCZ. Synonymy: *Tetanocera nanciae* Brimley; *Tetanocera plumifera* Wulp.

DISTRIBUTION: Alaska, B. C. to N. S. s. to Calif., Ariz., N. Mex., Mo., Ill., Pa., N. Y.

OREGON RECORDS: 18 May to 10 October; 1949 to 1972; 1300 to 5000 feet elev.

CROOK CO.: Powell Butte (BAF*). DESCHUTES CO.: 20 mi. south of Bend (BAF*); 10 mi. northeast of La Pine (BAF*); Redmond (BAF*); Tumalo Reservoir (BAF*). GRANT CO.: 3 mi. east of Prairie City (OSDA). HARNEY CO.: Hines (OSDA); Indian Creek southeast of Frenchglen (OSDA). JACKSON CO.: 23 mi. southeast of Eagle Point, Upper Dead Indian Soda Springs (OSU); Jenny Creek, Hwy. 66; nr. Prospect (BAF*); Tou Velle

State Park, Rogue River (OSU). JOSEPHINE CO.: 0.5 mi. south of Cave Junction; 4 mi. north of Selma (OSU); 4 mi. west of Selma (OSDA). KLAMATH CO.: 4 mi. north of Fort Klamath; 4 mi. south of Fort Klamath; Klamath Falls (BAF*); 20 mi. north of Klamath Falls; Klamath Game Refuge; 6 mi. south of La Pine; 4 mi. east of Sprague River. LAKE CO.: Chandler State Park (CAS); Drews Valley; 9 mi. south of Lakeview; 12 mi. south of Lakeview. LANE CO.: 8 mi. south of Florence (USNM). MARION CO.: Breitenbush (OSDA). UNION CO.: 8 mi. south of Union, Catherine Creek State Park (OSU). WALLOWA CO.: Enterprise (BAF*); Minam (BAF*); 6 mi. west of Wallowa. WASCO CO.: 13 mi. north of Warm Springs.

TETANOCERA OBTUSIFIBULA Melander

Melander, A. L. 1920. Ann. Entom. Soc. Amer. 13 (3): 328. Cotypes, thirty-seven specimens; Pullman and Mount Constitution, Washington; Worley, Idaho; Stanford, California; USNM.

DISTRIBUTION: B. C., Calif., Idaho, Oreg., Wash.

OREGON RECORDS: 25 May to 18 September; 1918 to 1972; 20 to 3500 feet elev.

BENTON CO.: 10 mi. south of Corvallis (BAF*). DOUGLAS CO.: 7 mi. east of Reedsport. HARNEY CO.: Alvord (OSDA). JACKSON CO.: Jenny Creek, Hwy. 66; 6 mi. north of Medford; 9 mi. north of Prospect. Woodruff Meadows (OSDA). JOSEPHINE CO.: 0.5 mi. south of Cave Junction; Redwood Hwy., mile post 19 (OSDA). LANE CO.: 3 mi. north of Junction City. LINN CO.: 9 mi. north of Brownsville (BAF*). WASCO CO.: Mt. Hood National Forest; 13 mi. north of Warm Springs; Hwy. 26, 1.5 mi. south of Jct. with Hwy. 216. WASHINGTON CO.: Forest Grove (UCB).

TETANOCERA PLEBEIA Loew

Loew, H. 1862. Smithsn. Inst., Smithsn. Misc. Collect. 6(1): 120. Types ♂ and ♀; Middle States.

DISTRIBUTION: Alaska, Yukon Terr., B. C. to Nfld. s. to Calif., Ariz., N. Mex., Iowa, Ill., Ind., Ohio, W. Va., N. Car.

OREGON RECORDS: 2 June to 7 August; 1917 to 1972; 2450 to 5240 feet elev.

CLACKAMAS CO.: Mt. Hood National Forest; 0.5 mi. west of Government Camp. DESCHUTES CO.: Sisters (BAF*). DOUGLAS CO.: Diamond Lake (CAS); 3 mi. southwest of Diamond Lake; 3.8 mi. northeast of Jackson Co. line, Hwy. 230. HOOD RIVER CO.: Hood River (UCB); Mt. Hood; 0.5 mi. south of Sherwood Campground. JACKSON CO.: Jenny Creek, Hwy. 66; 1.3 mi. southwest of Prospect; nr. Prospect (BAF*). KLAMATH CO.: 4 mi. north of Fort Klamath; 6 mi. south of La Pine; Odell Lake (BAF*); east of Willamette Pass. WALLOWA CO.: Enterprise (BAF*); 6 mi. west of Wallowa (OSDA).

TETANOCERA ROBUSTA Loew

Loew, H. 1847. Stettiner Ent. Stg., 8: 197. Types ♂ and ♀: Europe. Synonymy: *Tetanocera papillifera* Melander.

DISTRIBUTION: Europe; Alaska to Nfld., s. to Calif., N. Mex., S. Dak., Wis., Mich.

OREGON RECORDS: 18 June to 8 August; 1951 to 1972; 150 to 5100 feet elev.

BENTON CO.: 10 mi. south of Corvallis (BAF*). CLACKAMAS CO.: 1 mi. north of Government Camp; Mt. Hood National Forest. CROOK CO.: 1 mi. north of Prineville. GRANT CO.: nr. Strawberry Lake (BAF*). HARNEY CO.: Fish Lake, Steens Mts. (CAS). HOOD RIVER CO.: 0.5 mi. south of Sherwood Campground. KLAMATH CO.: Klamath Falls (BAF*); Odell Creek; east of Willamette Pass. LAKE CO.: Drews Valley; 9 mi. south of Lakeview. WALLOWA CO.: Enterprise (BAF*). WASCO CO.: 13 mi. north of Warm Springs. YAMHILL CO.: 5 mi. south of Dayton.

TETANOCERA ROTUNDICORNIS Loew

Loew, H. 1861. Berlin. Ent. Ztschr. 5: 344. Types ♂ and ♀. English River, Ontario.

DISTRIBUTION: Alaska to Nfld., s. to Oreg., Ill., N. Y.

OREGON RECORD: No dates available; 4105 feet elev.

Oregon (GSC*). KLAMATH CO.: Klamath Falls (BAF*).

TETANOCERA SOROR Melander

Melander, A. L. 1920. Ann. Entom. Soc. Amer. 13: 328. Type; Mica, Washington; USNM.

DISTRIBUTION: Calif., Idaho, Mont., Nev., Oreg., Wash.

OREGON RECORDS: 25 May to 30 September; 1918 to 1972; 1300 to 5000 feet elev.

BENTON CO.: Corvallis (BAF*); 10 mi. south of Corvallis. JACKSON CO.: 6 mi. north of Medford. LAKE CO.: Drews Valley. KLAMATH CO.: Snookum Meadow (UCB). WASCO CO.: Mt. Hood National Forest; Hwy. 26, 1.5 mi. south of Jct, with Hwy. 216; 15 mi. west of Pine Grove. WASHINGTON CO.: Forest Grove (UCD).

TETANOCERA UNICOLOR Loew

Loew, H. 1847. Stettin Ent. Ztg. 8: 199. Types ♂ and ♀: Europe.

DISTRIBUTION: Europe; Alaska to Nfld., s. to Oreg., Ariz., Iowa, Wis., Mich., N. Y.

OREGON RECORDS: 12 June to 9 July; 1965 to 1970; 2450 to 4100 feet elev.

CLACKAMAS CO.: Mt. Hood National Forest; 0.5 mi. west of Government Camp. HOOD RIVER CO.: Barlow Pass; 1.7 mi. north of Barlow Pass; 0.5 mi. south of Sherwood Campground. JACKSON CO.: 1.3 mi. southwest of Prospect. JEFFERSON CO.: 8 mi. north of Camp Sherman (OSDA).

TETANOCERA VICINA Macquart

Macquart, J. 1843. Soc. Roy. des Sci., de l'Agr. et des Arts, Lille, Mem. (1842): 337 or Dipt. Exot. (1843) 2(3): 180. Type; Philadelphia.

DISTRIBUTION: B. C. to Nfld., s. to Calif., Ariz., N. Mex., Iowa, Ill., Ind., Ohio, W. Va., N. Car.

OREGON RECORDS: 3 May to 7 August; 1917 to 1972; 20 to 5000 feet elev.

BENTON CO.: Corvallis (BAF*); Corvallis, Oak Creek (OSDA). DESCHUTES CO.: north of La Pine (BAF*). DOUGLAS CO.: 7 mi. east of Reedsport. HOOD RIVER CO.: Hood River (UCB). JACKSON CO.: Butte Falls (BAF*); nr. Prospect (BAF*); 1.3 mi. southwest of Prospect; northwest of Tou Velle State Park; 2 mi. south of Willow Lake, Indian Glade (OSDA). JOSEPHINE CO.: 0.5 mi. south of Cave Junction. KLAMATH CO.: 4 mi. north of Fort Klamath; 4 mi. south of Fort Klamath. LAKE CO.: Drews Valley. LANE CO.: Eugene airport; 3 mi. north of Junction City. WALLOWA CO.: Minam (BAF*). WASCO CO.: 13 mi. north of Warm Springs.

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ERRATA

A Correction in Notation of Sex of Type Specimens of *Pseudatrichia melanderi* Kelsey.—While checking the Diptera types on deposit in the California Academy of Sciences, preparatory to publishing a list of types held by them, it was discovered that there was a discrepancy in the material at hand and that published with the description of *P. melanderi* in Kelsey, L. P., 1969, A Revision of the Scenopinidae (Diptera) of the World. U. S. Nat. Mus. Bul. 277, p. 256 and I was asked to clarify the situation.

On checking my original drawings and notes I find that there was indeed an error in the designated sex of the Holotype and Allotype which should be corrected to read as follows:

Holotype: *Female* (USNM) 67465

Allotype: *Male* etc. (CAS) 8925

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